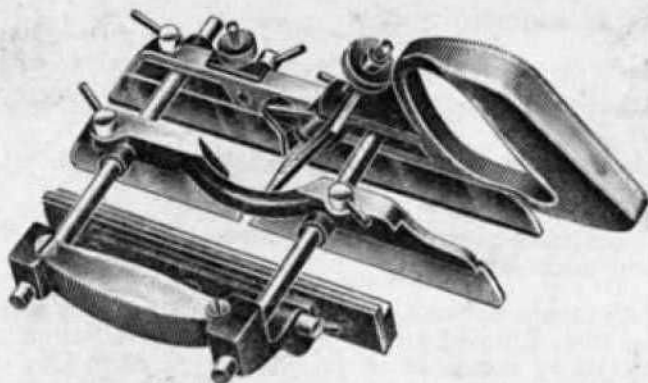


INSTRUCTIONS FOR USING

*The*

• LEWIN •

UNIVERSAL PLANE



AN IMPROVED MULTI-PURPOSE  
TOOL FOR CRAFTSMEN IN WOOD



*The*  
• LEWIN •

*Improved*  
UNIVERSAL PLANE

The "Lewin" Universal Plane is a British Made multi-purpose tool of an improved type.

It is built on unconventional lines and incorporates many new and advantageous features, such as :—

- Handles, stock and sliding section are of die-cast aluminium.
- It possesses extremely fine adjustments, easy manipulation and positive action.
- Adjustment of fence, cutter and depth gauge is provided by three knurled nuts and all points of adjustment are locked by means of an improved type of locking screw which supersedes the ordinary thumb screw generally used in planes of this nature. These locking screws, which are provided with a fixed tommy-bar, incorporate a special cam feature and are positive in action by a quarter turn in either direction.
- All wearable parts are of polished steel.
- Fence is of seasoned beech wood.
- Set of 18 cutter blades comprises 10 plough blades ( $\frac{1}{8}$  in. to  $\frac{1}{16}$  in.), 5 beading blades ( $\frac{1}{4}$  in.,  $\frac{5}{16}$  in.,  $\frac{1}{2}$  in.,  $\frac{5}{8}$  in.), two matching blades for  $\frac{3}{8}$ -in. and  $\frac{1}{4}$ -in. matching (adjustable for length of tongue), and one  $1\frac{1}{4}$  in. Filletster blade.

- Total weight of Plane (without cutter blades) is only  $3\frac{1}{2}$  lbs.

The "Lewin" Improved Universal Plane is an economic proposition because it costs considerably less than an assortment of plough, beading and matching planes covering the same range of work.

It cannot warp or twist and the amount of wear, even over a long period, is imperceptible.

It is well, though simply, made and there is little that can get out of order. It is well balanced, of light weight and after a little practice quite easy to use.

The Plane consists of five main features :—

Main Stock.

Sliding Section.

Fence.

Arms.

Auxiliary Handle.

**THE MAIN STOCK (5)** is designed of one piece die-cast aluminium into which is incorporated the handle (1), Cutter groove, with cam action locking screw, cutter adjusting screw (15), depth gauge with knurled adjusting screw and cam-operated locking screw (16) and steel blade (8). This blade is made up in two sections, the rear section providing a bearing for one edge of cutter, the bearing for the other edge is provided by the sliding section (4). Locking screws are provided for holding stock rigidly to arms.

**THE SLIDING SECTION (4)** is of aluminium to which a steel blade (9) in two sections is fitted, the rear section of the blade forming a support for other edge of cutting blade. Locking screws are provided for holding sliding section rigidly to arms after necessary adjustment for width of cutter has been made.

**THE FENCE (3)** This is of seasoned beech wood supported by a steel plate. Adjustment is provided by knurled screw, and after adjustment has been made fence is locked into position by two cam-action locking screws.

**ARMS (6-7)** These are 8 in. long and are of sufficient length to permit of wide range of adjustment. Longer arms can be supplied to order.

**AUXILIARY HANDLE (2)** This is of die-cast aluminium and is considered an advantage over the wooden knob handle generally employed in planes of this description. It affords a very rigid yet comfortable grip.

**THE BLADES** The cutter blades supplied with the plane are sufficient to cover the normal range of requirements, but odd sizes of special cutters can be supplied to order.

*See Indexed diagram, pages 6 and 7.*

## METHOD OF FITTING BLADES

It will be seen that each cutter blade is provided with a slot at reverse end. Place cutter with slot to right into cutter groove so that slot engages with pin on adjusting screw (11), turn knurled nut until blade comes flush with bottom of stock blade and tighten locking screw. Loosen locking screws on sliding section and move sufficiently to give support to left hand edge of blade (care should be taken to ensure that supporting blade of sliding section does not protrude beyond side of cutter blade otherwise clean results will not be obtained). Tighten locking screws.

This is merely a preliminary setting and further careful adjustment will be necessary before a satisfactory cut can be made.

## IMPORTANT

Be sure that locking screws are loosened and tightened before and after adjustment otherwise severe strain will result.

## ADJUSTING FENCE

The fence regulates the distance of the cutter from the edge of the work. It is used for all ploughing, beading and filletster operations. It is secured on the arms by two locking screws and may, by this means, be set in two positions for height. When it is desired to use the plane left handed the fence, complete with auxiliary handle, may be transferred to other ends of arms.

The fence is provided with dual adjustment. Preliminary adjustment is obtained by means of two locking screws and further and finer adjustment by knurled nut.

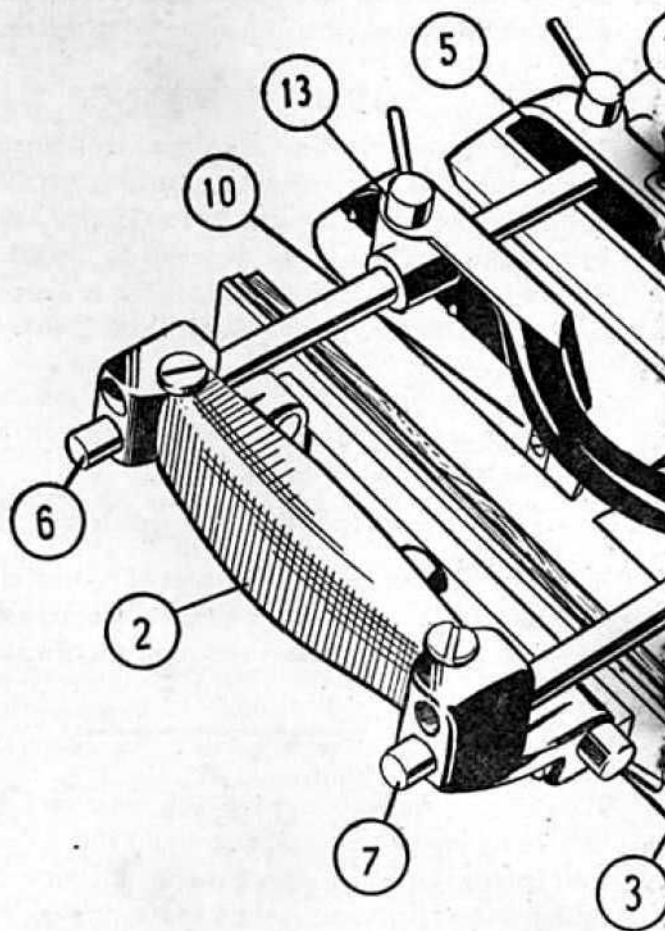
## THE USE OF SPURS

Spurs (10) are provided in the blades of both stock and sliding sections. These are only used when cutting cross-grained wood and when not required may be reversed out of action.

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The foregoing instructions have been based on the assumption that the "Lewin" Improved Universal Plane is the type of tool used only by craftsmen with experience in normal methods of cutting dados, beadings, rabbets and matchings, etc., but it is felt that some assistance may be required by those not fully conversant with tools of this nature. Whilst every effort has been made to simplify these instructions they may at first glance, appear a little involved but careful study and a little practice will show how simple the Plane is to use in its many applications.

# THE "LEWIN" IMPROV

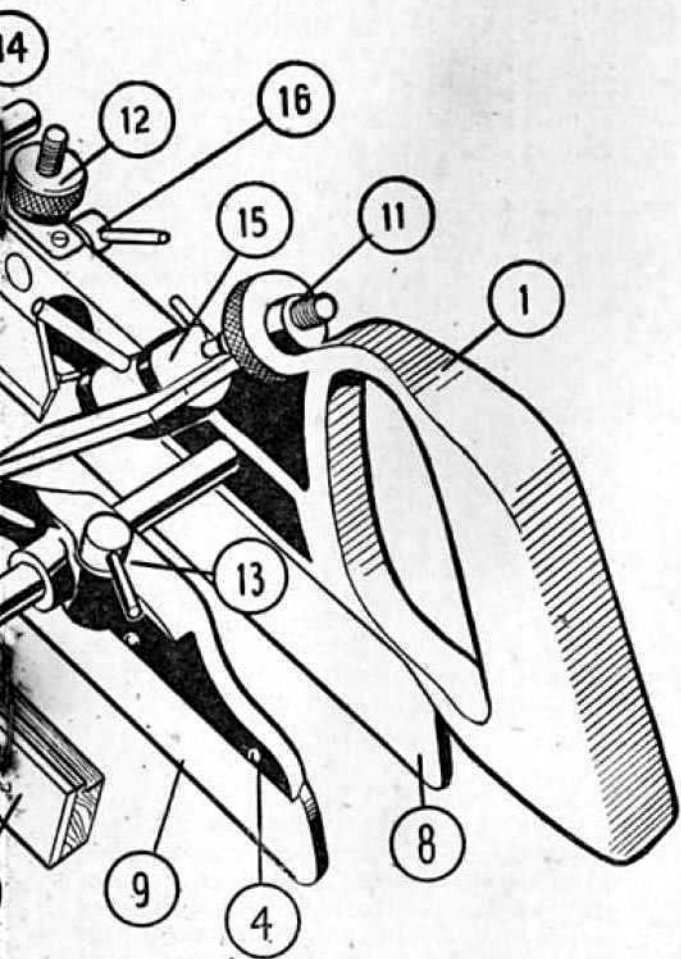


## INDEXED GUIDE TO

1. Main handle.
2. Auxiliary handle.
3. Fence.
4. Sliding Section.

5. Main stock.
6. Forward arm.
7. Rear arm.
8. Main stock blade.

# ED UNIVERSAL PLANE

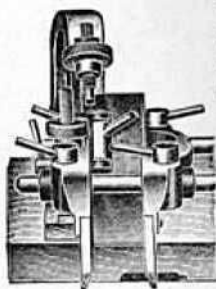


## THE VARIOUS PARTS

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| 9. Cross section blade.          | 13. Cross section locking screws. |
| 10. Spur.                        | 14. Main stock locking screws.    |
| 11. Blade adjusting screw.       | 15. Blade locking screw.          |
| 12. Depth gauge adjusting screw. | 16. Depth gauge locking screw.    |

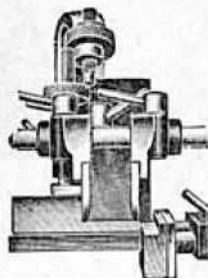
Method of adjusting Plane for cutting Dados, Beadings Ploughs, Rabbets, Matchings (Tongue and Groove), etc.

### FOR DADOS (Groove across the Grain)



Fence and auxiliary handle should be removed entirely for this operation. Set the spurs (10) on stock and sliding section, which must be sharp, by reversing into position. Insert cutter blade of desired width. Set the sliding section so that its spur is in line with edge of cutter blade. Nail a straight-edged batten on the edge of the groove to be cut. Adjust depth gauge to height of batten which acts both as a guide to depth of groove and as a fence. The spurs cut the edges clean as the cutter blade cuts the groove.

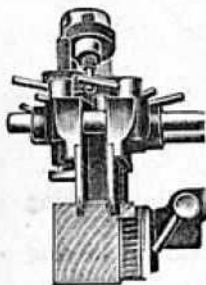
### FOR RABBETING



A cutter blade a little wider than the desired width of rabbet should be used for this purpose.

The sliding section (4), with its spur (10) out of action, is slid up about halfway behind the cutter blade to give support. The spur on main stock (5) is reversed into action. Fence is adjusted to regulate width of rabbet and depth gauge to guide the depth.

### FOR BEADING

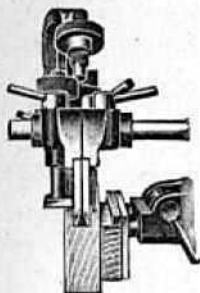


Spurs should be out of action at all times when cutting beads. Set cutter blade of required size so that the outside edge of sliding section (4) is in line with outer edge of blade. The fence (3) regulates distance from edge to board and depth gauge is adjusted for depth of cut. The top of the bead should be finished very slightly below surface so as to obtain the correct radius.



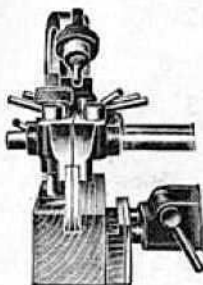
## FOR PLOUGHING

The procedure when adjusting plane for ploughing is very simple. Spurs should be out of action. Insert cutter blade of required width, adjust fence and depth gauge. Sliding section is required to give support to blades of  $\frac{1}{4}$  in. and wider but for narrower ploughing it should be moved against the fence or where exceptionally deep ploughs are to be cut, or where there is a lot of work to be done it should be removed entirely.

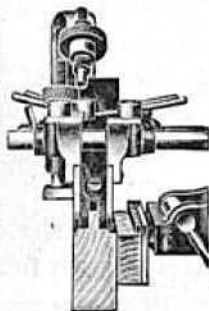


## FOR MATCHING (Tongueing and Grooving)

The tongue : Select blade of required width, adjust stop on blade to regulate height of tongue. This stop acts as a depth gauge so that ordinary depth gauge is not required. Spurs should be reversed out of action. The distance from the edge is regulated by the fence which must be very carefully adjusted to ensure tongue being correctly centred.



Use a plough cutter blade of the same width as the thickness of the tongue. The depth gauge regulates the depth of groove and the fence the distance from the edge. Here again the fence must be very carefully adjusted to ensure groove being properly centred. When using blades of less than  $\frac{1}{4}$  in. width the sliding section is not required and spurs should be reversed out of action.



If the foregoing instructions are carefully studied the "Lewin" Universal Plane will prove of inestimable value in its numerous applications and should give life-long performance but the following points should be carefully observed to ensure the tool giving efficient trouble-free service.

- 1 Cutter blades are supplied with ground bevel only, they should be carefully honed, the flat blades on a good oil-stone and the shaped blades with a slip. A carver's slip is ideal for this purpose. (When sharpening shaped cutters care must be taken to maintain grinding bevel otherwise radius will be affected.)
- 2 Blades must be really sharp to obtain the best results.
- 3 A number of thin shavings will give a smoother, cleaner surface than one thick one. A fairly heavy cut may be made when ploughing but light cuts are essential to get the best results in beadings, mouldings, etc.
- 4 A little candle wax applied to the fence occasionally is better than oil.
- 5 Always keep the fence pressed well up to the work but do not exert undue pressure on the stock. Steady, firm, even cuts will give the best results.
- 6 Great care must be taken to keep the plane clean and all steel parts free from rust to obtain maximum service at all times.

CUTTER BLADES

*for*

° LEWIN °

UNIVERSAL PLANE

